

REMARKS**Overview**

Claims 1-3, 9-12, 16-18, 20, 22-25, 30 and 31 are pending in this application. Claims 1, 9, 18, 30 and 31 have been amended. The present response is an earnest effort to place all claims in proper form for immediate allowance. Reconsideration and passage to issuance is therefore respectfully requested.

Issues Under 35 U.S.C. § 103

Claims 1 and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 6283301 in view of Chiang 99/53505. These rejections are respectfully traversed.

To assist in the interpretation of JP 6283301, a translation of the Japanese patent publication was acquired and is submitted with this response. The Examiner is asked to review this English translation at it further clarifies patentable distinctions between the Applicants' claimed invention and JP 6283301. As the Examiner has already recognized, JP '301 does not disclose the "first nickel barrier plating" and "second nickel barrier plating of claim 1" (Office Action, page 2, numbered paragraph 2). JP '301 also does not disclose "mechanically bonding the film resistors without adhesive" as the Examiner also recognizes (Office Action, page 2, numbered paragraph 2). JP '301 also does not disclose "in an encapsulate of glass frit" as the Examiner also appears to recognize (Office Action, page 2, numbered paragraph 2). It is also submitted that JP '301 does not disclose the limitation of "whereby the first and second nickel barrier plating used to connect the end caps and the encapsulant provide long-term mechanical stability and resistance to resistive heating" of claim 1 nor the new limitation of "wherein the power chip resistor is flow solderable due to the resistance to resistive heating provided by the first and second nickel barrier plating."

It is maintained that JP '301 does not disclose a power resistor, although it recognizes that the Examiner considers all resistors to be a power resistor. The use of the term "power chip resistor" further places the present invention in a particular context and emphasizes the advantage and importance of "mechanically bonding the film resistors without adhesive" and providing "long-term mechanical stability and resistance to resistive heating" and being "flow solderable due to the resistance to resistive heating provided by the first and second nickel barrier plating."

A few additional observations are made with respect to the Japanese translation of JP 6283301. In particular, the Examiner is directed to [0006] which states that "said plural terminal electrodes (11b), (11c), (12b), (12c) of said joined body (14) are collectively covered by means of leadframes (13, 13) coated with solder, while said leadframes (13), (13) are aligned; the solder between said joined body (14) and leadframes (13), (13) is fused so that said leadframes are bonded to said joined bodies." Thus, it is apparent from JP '301 that solder is present between different chips and connects the leadframes to the chips. Thus, the JP '301 device does not provide a power chip resistor with barriers or barrier plating to mechanically bond film resistors as JP '301 solders together its various chip-type electronic parts and thus is also not designed to connect the barrier or barrier plating in a manner that provides resistance to resistive heating.

With respect to Chiang, Chiang does not disclose stacking of chip resistors, rather Chiang discloses a composite circuit protection device comprised of stacked laminar circuit protection devices. Thus, although Chiang discloses a stacked configuration, Chiang does not disclose that its laminar circuit protection devices are independent chip resistors when not stacked. It is also observed that the Examiner interprets Chiang as disclosing that any metal barriers may be useful for aids in stacking chips citing to page 11, lines 29-36 (Office Action, page 2, numbered paragraph 2). This portion of Chiang relates to the interfacial connections which are not the

same as the connections between end caps or the barriers of the claimed invention. See e.g., Figures 8 and 9 where the interfacial connections 54 are not end caps or barriers as claimed.

The Examiner also indicates that Chiang discloses that any insulator can be used, citing to page 10, lines 18-25 (Office Action, page 2, numbered paragraph 2). The insulating member referenced by that portion of Chiang is intended to insulate adjacent electrodes which is a different purpose than the glass frit serves in the claimed invention.

It is further observed that the Examiner takes official notice that glass is a well-known electrical insulator, however, neither reference relied upon by the Examiner discloses using a non-adhesive insulating member to separate the chip resistors but not the electrodes. Therefore, for all these reasons, these rejections to claims 1 and 31 should be withdrawn.

Claims 2-3, 9-12, 16-18, 20, 22, 24-25 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 6283301 in view of Chiang 99/53505, further in view of Hashimoto. These rejections are respectfully reversed. Differences between JP 6283301 and Chiang have already been discussed. Therefore, these rejections should also be withdrawn.

Claim 23 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 6283301 in view of Chiang 99/53505 and Hashimoto, further in view of Nakamura et al. These rejections are respectfully traversed. In particular, the deficiencies of JP 6283301, and Chiang 99/53505 have already been discussed. Therefore, it is respectfully submitted that this rejection should also be withdrawn.

Conclusion

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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